



# PUMPS & COUNTER-CURRENT SWIMMING SYSTEMS

O Pumps & Countercurrent Swimming Systems

Welcome to the world of technological innovation and modern design!

The groundbreaking water-cooled Inver Master is up to 40 times quieter than conventional pumps and is a real blessing for anyone who wants to enjoy peace and relaxation by the pool. With its impressive performance and unique design, it sets new standards in pool technology.

The Speck BADU Delta Eco VS continues to be a true masterPiece that redefines the limits of what is possible. Choosing a frequency-controlled pump is the key to an efficient and energy-saving pool system.

With the pump unit of the powerful Badu Jet Turbo Light counter-current swimming system from Speck, you can transform your pool into a raging water paradise. Experience the intoxicating power of water and be inspired by the incomparable performance!

#### **OVERVIEW**

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MIDA.Pombi

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#### **PUMPS**

#### SELECTION OF THE CIRCULATION CAPACITY

#### When designing your dream pool, the first questions often arise regarding the pump.

A circulation pump plays a decisive role here. It is the heart of the entire pool system. An incorrect or unsuitable pump can lead to problems and inconveniences that can affect the enjoyment of the pool. To avoid this, we have prepared some important information and calculations here to help you determine the right circulation capacity and flow rate.



#### How often should the pool water be circulated?

The pool water should be circulated 2-3 times a day.



#### What flow velocity should be achieved?

The flow rate should be <u>15-30 m/h</u> for filtering and <u>50-70 m/h</u> for backwashing. We therefore recommend frequency-controlled circulation pumps, as these operate at variable speeds. The performance for filtering and backwashing can therefore be optimally adjusted. Furthermore, the use of a frequency-controlled circulation pump results in enormous savings in electricity costs, even if the filter is operated 24/7. This means that such a pump can be amortized after approx. 2 years (depending on operation and conditions). An additional advantage is the significantly quieter noise level compared to conventional circulation pumps.



#### What is volume flow and how is it calculated?

The volume flow is the amount of water that flows through the filter system of your pool within a certain time. This parameter is required to calculate the circulation capacity.

$$Q = \frac{V}{t} \rightarrow Q = \text{volume flow}$$

$$V = \text{pool volume}$$

$$t = \text{circulation time (in hours)}$$

#### What is the circulation capacity and how is it calculated?

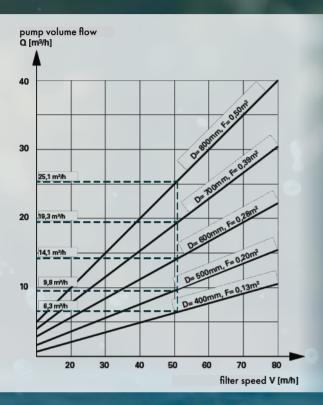
The circulation rate is the total amount of water that is circulated through the filter system of a pool per day over a certain period of time. This parameter is important to ensure that all the pool water is regularly circulated through the filter, which is crucial for the filtration, disinfection and homogenization of the water.





#### **SELECTION OF THE FILTER DIAMETER &** PIPE DIAMETER CALCULATION

It is important that the diameter of the filter tank is proportionate to the capacity of the swimming pool pump. This ensures that the dirt has sufficient time to settle in the filter sand during the filtering process. The filter pump should also be powerful enough to effectively flush the dirt out of the filter sand during backwashing. The water flow rate must also be optimal in order to circulate the pool efficiently. The following diagram will help you to determine the filter diameter.



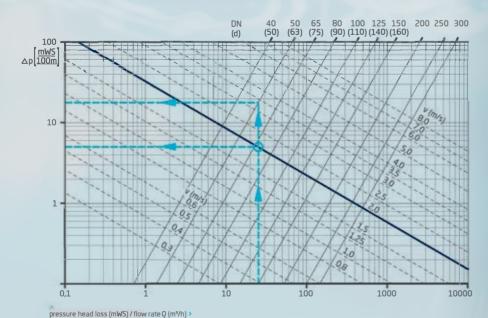
The diagram below helps you to determine pipe friction losses and shows how to calculate the correct pipe diameters.

exa mple	Q = 25 m³/h, 20 m plastic pipe with	DN 50 ≙ d 63 DN 65 ≙ d 75	
	Loss amount read from table	H <sub>v</sub> = 18,00 m per 100 m 5,00 m per 10	00 m
loss a mount	t 20 m pipe (times 10/100	H <sub>v</sub> = 3,60 m 1,00 m	
	Control of the flow Velocity	v = 3,40 m/s (too high) 2,00 m/s (i. 0.)	)

The pressure head losses in this example apply to pure water at a temperature of 20 °C, or for liquids with the same kinematic Viscosity and for new PVC-U pipes.

DN > pipe inner diameter in mm
d > tube outside diameter in mr
> optimum flow rate
im Rohr

O > DN 65 or PVC d 75











InverSilenceTM by Aquagem is a revolution in the pool industry. The combination of full inverter technology, spiral hydraulic system and brushless DC motor makes the circulation pumps not only the quietest, but also the most efficient on the market!

The Full Inverter technology in circulation pumps represents an advanced approach to efficient control and optimization of the pool water circuit. In contrast to conventional ON/OFF pumps, which operate at constant speeds, a Full Inverter circulation pump enables smoother, stepless start-up and dynamically adapts to the specific requirements of pool operation. This enables considerable energy savings, as it only consumes as much energy as is needed. This not only helps to reduce operating costs, but also reduces the ecological footprint.

The spiral hydraulic system optimizes the water flow and hydraulics of the pump, resulting in improved performance and filtration. At the same time, it helps to make the pumps the quietest on the market. The clever design and interplay of technologies minimizes vibration and significantly reduces noise levels, creating a pleasant and quiet environment around the pool.

The InverSilence technology thus sets new standards for pool circulation pumps by not only offering the highest energy efficiency and performance, but also focusing on low noise. These pumps are ideal for pool owners looking for a powerful, energy-efficient and quiet solution to maximize the pool experience.

### **WATER AND ENERGY IN HARMONY**

#### SUSTAINABILITY THROUGH FULL INVERTER TECHNOLOGY



Full inverter pumps - Energy consumption

Up to 67,000 kWh in 10 years With an operating time of 16 hours per day.



Longer filtration, more energy savings with an operation of 2 circulations per day.





#### Why is saving water so important?

The importance of saving water lies in the sustainable use of resources and environmental protection. With Full Inverter circulation pumps, you can not only optimize water circulation, but also minimize consumption. This measure makes a significant contribution to conserving precious resources and promoting environmentally friendly pool operation.

#### Differences between ON/OFF and inverter pumps.







ADVANTAGES FOR YOUR POOL





#### **BETTER HEAT EXCHANGE**

Create a better heating effect in the low-speed water circuit.



#### **INTELLIGENT FILTRATION**

Improved filtration and durability due to slower water flow.



#### MORE EFFICIENT DISINFECTION

Optimization for electrolytic cells and sensors to ensure maximum disinfection performance.



#### **EXTENDED PIPE SERVICE LIFE**

Slow water flow to reduce friction in the pipes





AQUAGEM INVER MASTER
FULL-INVERTER CIRCULATION PUMP



NEW



DISTRIBUTION RESTRICTION\*\*

# THE QUIETEST

PUMP IN THE WORLD

20x ENERGY SAVING WITH INVER MASTER





## **ZCX** ENERGY SAVING

Compared to traditional circulation pumps, the Inver Master allows you to save money every year\*:

8.322 kW/h

save on energy consumption

3.328,80 €

save on electricity costs

2.338 kg

avoid CO2 emissions

130

planting trees

\*Example: An 8 x 4 m pool with year-round operation runs for an average of 16 hours, 365 days a year. The electricity price is €0.40/kWh.

# QUIETER 3

In addition to the InverSilence technology, the water cooling system makes the pump fan-free and the operating noise level is only 30 dB(A)/1m. This corresponds to a 40-fold noise reduction compared to a conventional circulation pump.













"One click" backwash

#### **INVER SILENCE TECHNOLOGY**

The pump is the heart of the pool. For decades, the high energy consumption and noise of a circulation pump was a well-known problem. To address this challenge, Aquagem has developed the pioneering **Inver Silence** technology, the leading technology for noise reduction and efficiency improvement.

The technology combines the inverter drive, the Volute hydraulic structure and the brushless DC motor to precisely control the speed through intelligent algorithms.



# Real-time Print recognition Intelligent calculation Automatic adjustment

# ARTIFICIAL INTELLIGENCE TECHNOLOGY

The inverter "brain" can not only monitor the changes in line pressure and make intelligent calculations, but also send commands to the pump motor to automatically adjust the flow range and operating capacity. Therefore, the pump can not only provide users with line detection and early warning service, but also set a reasonable flow rate.







# External control RS485 Modbus, digital input, analog input, relay output



## **High-quality components**brushless IE5 DC motor, mechanical seal: SUS316



#### Soft Start

the pump starts from 0 ampere to the rated power continuously



**No-water protection** to protect the pump from running dry



Suitable for salt electrolysis saltwater concentration up to 0.5%.

#### INTUITIVE USER INTERFACE

The intuitive user interface makes it easy to control and monitor various operating parameters. For example, you can easily keep an eye on the flow rate, power consumption and pump capacity and adjust them if necessary.

The controller also offers various operating modes and programmable timer functions that allow the water circuit to be adapted to individual schedules. Experience uncomplicated handling and maximum efficiency with the intelligent control of the **Inver Master** pump.



The hydraulic spiral structure not only reduces turbulence and pressure losses, but also enables more efficient circulation of the water in the pool.

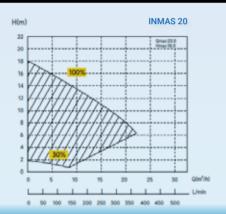


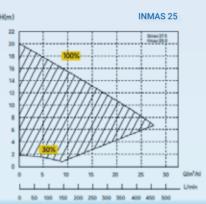


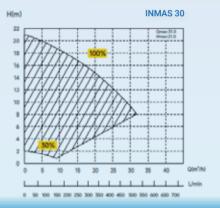
The Inver Master pump combines maximum energy efficiency through the use of an efficient brushless IE5 DC motor. This solution not only enables precise speed control (1200 - 2900 rpm), but also offers low maintenance, quiet operation and adaptability to current requirements.

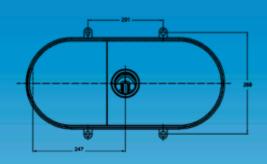
Technical data	Inver Master 20	Inver Master 25	Inver Master 30
Voltage		230 V/50 Hz	
Power consumption P1	max. 0,80 kW	max. 1,10 kW	max. 1,40 kW
Power output P2	max. 0,62 kW	max. 0,92 kW	max. 1,20 kW
Suction side connection		2" IG	
Pressure side connection		2" IG	
Pump capacity*	23 m³/h	27,5 m³/h	31 m³/h
Weight		23 kg	
Protection class		IP55	

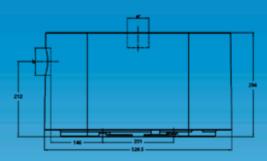


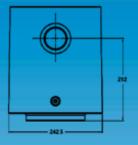












Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Connection	Weight	Code
InverMaster 201)	230V/50 Hz	max. 0,80 kW	max. 0,60 kW	23 m³/h	2" IG	23 kg	INMAS20
InverMaster 25 <sup>1)</sup>	230V/50 Hz	max. 1,10 kW	max. 0,92 kW	27,5 m³/h	2" IG	23 kg	INMAS25
InverMaster 30	230V/50 Hz	max. 1,40 kW	max. 1,20 kW	31 m³/h	2" IG	23 kg	INMAS30

<sup>\*</sup>Pump capacity at 8 m/Ws

<sup>1)</sup> Not a stock item, available on request.





AQUAGEM INVER WARRIOR FULL-INVERTER CIRCULATION PUMP



NEW

MODERN, TRENDY

INTELLIGENT

ENERGY SAVING
WITH INVER WARRIOR





ESSENTIAL ADVANTAGES

**External control** RS485 Modbus, digital input, analog input, relay output

WiFi optional

The pump can be controlled at any time and from anywhere.

**Soft Start** 

With inverter technology, the pump starts up continuously from 0 amps to the rated output.

Suitable for salt electrolysis Saltwater concentration up to 0.5%.

No-water protection to protect the pump from running dry

#### **ENERGY SAVING** WITH MAGIC INVERTER

Thanks to the use of inverter technology, the operating capacity can be precisely regulated from 30% to 100%. The motor speed can be precisely controlled (between 1200 - 2900 rpm), which enables a 15-fold energy saving compared to classic circulation pumps.

100w 10m<sup>3</sup>/h

200w

14.2 m<sup>3</sup>/h

1050w 24.5 m<sup>3</sup>/h







- Operating mode (Inverter/Manual)
- Flow rate indicator in m<sup>3</sup>/h
  - Power consumption display in watts
- "One click" Backwash

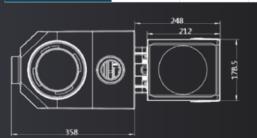
Technical data	Inver Warrior 20	Inver Warrior 25	Inver Warrior 30	Inver Warrior 40			
Voltage		230 V	/50 Hz				
Power consumption P1	max. 0,75 kW	max. 1,05 kW	max. 1,40 kW	max. 1,75 kW			
Power output P2	max. 0,60 kW	max. 0,85 kW	max. 1,15 kW	max. 1,50 kW			
Pump capacity*	18,3 m³/h	23,6 m³/h	28,2 m <sup>3</sup> /h	36,2 m <sup>3</sup> /h			
Suction side connection		2"	'IG				
		2"	'IG				
Weight	17,5 kg	17,5 kg	17,5 kg	18,5 kg			
Max. water temperature	50°C						
Protection class	tion class IP55						
Code	INWAR20	INWAR25	INWAR30	INWAR40			

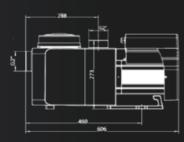


Whispering 30 dB

Refrigerate
33 dB

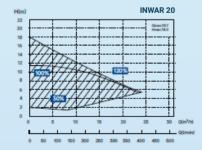
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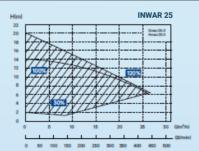


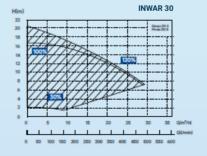












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Version	Voltage	Power consumption P1	Power output P2	Power output P2	Connection	Weight	Code
InverWarrior 20 <sup>1)</sup>	230V/50 Hz	max. 0,75 kW	max. 0,60 kW	18,3 m³/h	2" IG	17,5 kg	INWAR20
InverWarrior 25	230V/50 Hz	max. 1,05 kW	max. 0,85 kW	23,6 m³/h	2" IG	17,5 kg	INWAR25
InverWarrior 30 <sup>1)</sup>	230V/50 Hz	max. 1,40 kW	max. 1,15 kW	28,2 m <sup>3</sup> /h	2" IG	17,5 kg	INWAR30
InverWarrior 40	230V/50 Hz	max. 1,75 kW	max. 1,50 kW	36,2 m <sup>3</sup> /h	2" IG	18,5 kg	INWAR40





#### FREQUENCY-CONTROLLED CIRCULATION PUMP, SELF-PRIMING

DAB E.SWIM

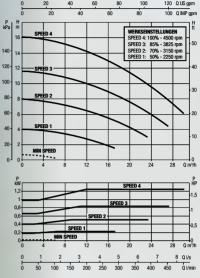


EXTREMELY QUIET! THE QUIETEST AND MOST EFFICIENT ELECTRONIC SWIMMING POOL PUMP Permanent magnet motor, extremely quiet, due to water cooling (no fan)

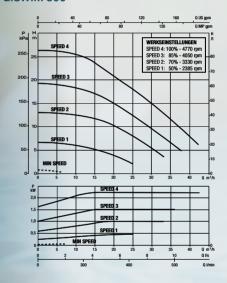
- Adjustable from 10-100%, adjustable speed in rpm or a constant flow in m³/h (min. 6 m3/h)
- Timer with 4 steps
- For pools with a volume of up to 200 m³
- Can be set up max. 10 m above or 4 m below the water level, with integrated fibre trap (capacity approx. 4 l)
- Including two drain plugs for pre-filter and pump housing
- Protection class IPX5
- LCD display 2.75" x 1.85" with integrated filter control,
- Frost protection, quick-clean mode and possible locking of the display
- Error memory: key lock of the display is possible
- The motor or pump shaft does not come into contact with the water with the water in the circuit. Electrical separation.
- · Delivery without connection cable,
- · Large stand with rubber feet
- Noise level ~45 dB at 1 m distance (at 60% power).
- Note: Internal time control, for external control the control cable # ESWIM1-E1 is required.
- Control is possible as follows: manually with 4 steps, via timer with 4 steps or externally (0-10V, 4-20mA or PWM signal)
- Salt electrolysis suitable: yes (up to 3.5%)
- Sea water suitable: yes (up to 3.5%)







#### **E.SWIM 300**



- ✓ WATER COOLING✓ INTEGRATED CONTROL
- **✓ SALT RESISTANT**

Version	Voltage	Power input	Power output	Pump capacity*	Connections (suction and pressure side)	Weight	Article
E.SWIM 150	230 V/50 Hz	max. 1,25 kW	max. 1,1 kW	27 m³/h	2" IG	19 kg	ESWIM1
E.SWIM 300	230 V/50 Hz	max. 2,25 kW	max. 1,9 kW	40 m³/h	2" IG	21,3 kg	ESWIM2



#### **CONTROL CABLE**

DAB E.SWIM

Communication cable 16 m length For external control of the E.SWIM pump, 12-pole



Version	Length	Weight	Code
DAB E.SWIM Steuerkabel	16 m	2,25 kg	ESWIM1-E1





#### **SELF-PRIMING FILTER PUMP**

MIDA.AUREL

For max. 500 m3 pools. High flow self priming pump with 1,450 rpm or 2,850 rpm motor, designed for big filtration installations. Equipped with a big capacity strainer in the inlet that among its excellent performance generates a high filtration capacity. Prefilter with a transparent lid that allows easy inspection of the basket. Features standard connection flanges which together with a broad base make the system especially robust. Mating flanges not including (available on request). No possible electrical contact with the water as no part of the motor is open to it. Use in salt electrolysis: possible. Use in sea water: possible – when fitted with AISI-316 mechanical seal (available on request).

#### Applications: super-quiet pump (1,450 rpm).

High-volume self-priming pump available in 1,450 rpm and 2,850 rpm versions, ideal for larger filtration systems.

Features large suction-side pre-filter which together with excellent hydraulic performance ensures extremely high filtration capacity. Filter with polycarbonate cover for easy viewing of pre-filter basket contents. Counter-flanges not supplied as standard (available on request). Turbine available in 2 versions, Noryl or marine bronze, as per request.

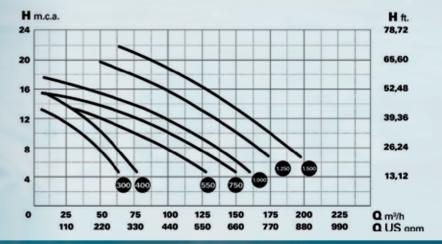
Constructive characteristics: pre-filter body, pump body, volute, pump base and cover in glass-fibre loaded polypropylene resistant to pool chemicals. Pre-filter basket in polythene. Polycarbonate pre-filter cover with four-pin closure system.

Mechanical seal in ceramic carbon and AISI-304 stainless steel. Screws in AISI-304 stainless steel.

**Motor:** Enclosed asynchronous motor with external ventilation. Protection grade IP-55. Class F insulation.

1,450 rpm and 2,850 rpm. Double frequency (50 Hz and 60 Hz). Motor bearings greased for life to ensure long duration and silent operation.





Version	Voltage	Power output kW	Power output HP	Pump capacity*	r.p.m.	Connection on suction and on pressure side	Weight in kg	Code Noryl Impeller	Code Bronze Impeller
MIDA.Aurel 300	380 V	2,2	3,0	43 m³/h	1.450	DN 110 flanged	42,5	993.3	
MIDA.Aurel 400	380 V	3,0	4,0	56 m³/h	1.450	DN 110 flanged	44,5	994.3	
MIDA.Aurel 550	380 V	4,0	5,5	84 m³/h	1.450	DN 110 flanged	53,4	Aurel 5,5 HP	
MIDA.Aurel 550	380 V	4,0	5,5	84 m³/h	1.450	DN 110 flanged	53,4		Aurel 5,5 BR
MIDA.Aurel 750	380 V	5,5	7,5	107 m³/h	1.450	DN 110 flanged	66,0	Aurel 7,5 HP	
MIDA.Aurel 750	380 V	5,5	7,5	107 m³/h	1.450	DN 110 flanged	66,0		Aurel 7,5 BR
MIDA.Aurel 1000	380 V	7,5	10,0	126 m³/h	1.450	DN 110 flanged	76,0	Aurel 10,0 HP	
MIDA.Aurel 1000	380 V	7,5	10,0	126 m³/h	1.450	DN 110 flanged	76,0		Aurel 10,0 BR
MIDA.Aurel 1250	380 V	9,2	12,5	152 m³/h	2.850	DN 110 flanged	84,5		Aurel 12,5 BR
MIDA.Aurel 1500	380 V	11,0	15,0	177 m³/h	2.850	DN 110 flanged	85,5		Aurel 15,0 BR





#### SPECK BADU DELTA ECO VS







#### THE MOST EFFICIENT BADU PUMP EVER!

The BADU Delta Eco VS swimming pool pump has a motor display with intuitive control, which ensures low power consumption. It is particularly quiet and efficient thanks to its new hydraulic design. LED lighting in the transparent cover allows easy visual inspection. Internal drain plugs prevent the risk of breakage. The permanent magnet motor ensures efficient energy savings.

- · Permanent magnet motor
- · LED in transparent lid
- · Adjustable speeds: 600 3,000 rpm (in steps of 10), for pools with a volume of up to 150 m3

· Can be installed max. 3 m above or below the water level, with integrated fiber trap (capacity approx. 4 l), can be used for swimming pool water with a salt concentration of up to 0.5 % (corresponds to 5 g/l)

Info button on the LED display for current consumption in kW.

• The motor or pump shaft does not come into contact with the water in the circuit. Electrical isolation.

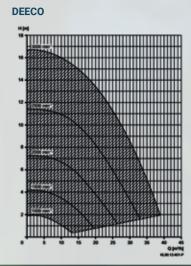
- Delivery includes 3 m connection cable.
- Noise level 35.7 65.6 dB at a distance of 1 m.
- Note: External time control via potential-free contacts.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- · Suitable for seawater: no

The pump is also available in a version with magnetic coupling (without mechanical seal) (#DEMCO, see catalog page 57).

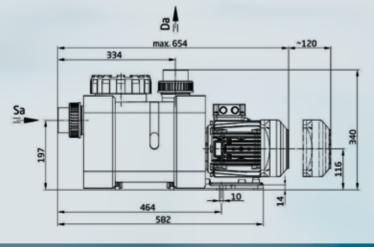
Technical data	
Voltage	230 V/50 Hz
Power consumption P1	0,37 bis 1,4 kW
Power output P2	0,03 bis 1,1 kW
Pump capacity*	31 m³/h
Suction side connection	63 mm adhesive
Pressure side connection	63 mm adhesive
Weight	14 kg
Pool size	max. 150 m³
Protection class	IP55

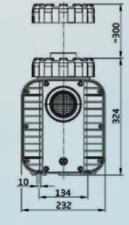
<sup>\*</sup>Pump capacity at 8 m/Ws











Version	Code
BADU Delta Eco VS	DEECO

56 Photos: Speck Pumpen





#### SPECK BADU DELTA-MK ECO VS





#### THE MOST EFFICIENT BADU PUMP EVER!

- · Permanent magnet motor
- LED in transparent lid
- Adjustable speeds: 2000 3,000 rpm (in steps of 10), for pools with a volume of up to 150 m3.
- Can be installed max. 3 m above or below the water level, with integrated fiber trap (capacity approx. 4 l), can be used for swimming pool water with a salt concentration of up to 0.5 % (corresponds to 5 g/l).

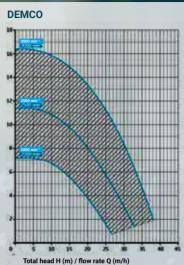
- Info button on the LED display for current consumption in kW.
- The motor or pump shaft does not come into contact with the water in the circuit. Electrical isolation.
- · Delivery includes 3 m connection cable
- Noise level 35.7 65.6 dB at a distance of 1 m
- Note: External time control via potential-free contacts
- Suitable for salt electrolysis: yes (up to 0.5 %)
- · Suitable for seawater: no

Technical data	
Voltage	230 V/50 Hz
Power consumption P1	0,48 bis 1,8 kW
Power output P2	0,37 bis 1,4 kW
Pump capacity*	31 m³/h
Suction side connection	63 mm Adhesive
Pressure side connection	63 mm Adhesive
Weight	14 kg
Pool size	max. 150 m³
Protection class	IP55

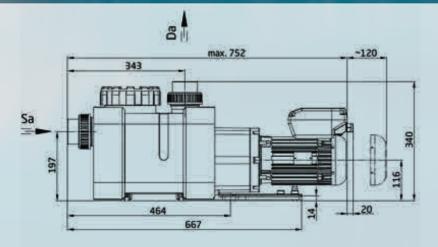
\*Pump capacity at 8 m/Ws

with magnetic coupling (without mechanical seal)









10 150 196 232	

Version	Code
BADU Delta-MK Eco VS	DEMCO

57 Photos: Speck Pumpen





#### SPECK BADU PRIME ECO VS



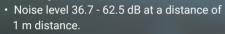


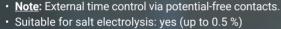


Speck BADU Prime Eco VS combines the successful design with a synchronous compact drive to create a highly efficient power pack in a space-saving design. An integrated control panel and simple menu navigation ensure easy handling.

The tried-and-tested membrane keypad with 8 buttons without double assignment makes it easy to make settings. Savings are possible with the BADU Prime Eco VS via the speed adjustment, the info button informs you about the current consumption. The suction parameters of the pump can be programmed variably.

- Permanent magnet motor, adjustable speeds from 1,000 3,000 rpm (in steps of 10), for pools with a volume of up to 120 m3.
- Can be installed max. 3 m above or below the water level, with integrated fibre trap integrated fibre trap (capacity approx. 3 l), can be used for swimming pool water with asalt concentration of up to 0.5 % (corresponds to 5 g/l).
- · Info button on the LED display for current consumption in kW.
- · Bellows mechanical seal mounted on plastic impeller hub,
- · The motor or pump shaft does not come into contact with the water in the circuit - electrical separation.
- Delivery includes 3 m connection cable.





• Suitable for seawater: no

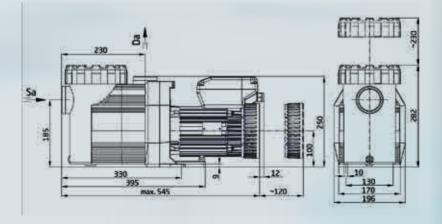




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Technical data	
Voltage	230 V/50 Hz
Power consumption P1	0,08 - 1,4 kW
Power output P2	0,3 - 1,10 kW
Pump capacity*	24 m³/h
Suction side connection	2" IG
Pressure side connection	1 ½" IG
Weight	11,5 kg
Pool size	max. 120 m <sup>3</sup>
Protection class	IP55

\*Pump capacity at 8 m/Ws



Version	Code
BADU Prime Eco VS	PRECO

Photo: Speck Pumpen





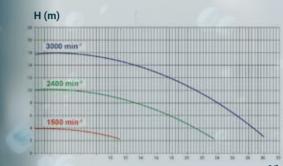
#### KRIPSOL KS EVO VS





- Permanent magnet motor, setting of 3 speeds from 600 3,000 rpm. (in steps of 20) and up to 5 filter times, for pools with a volume of up to 120 m³, Can be set up max. 3 m above and below the water level, with integrated fibre catcher integrated fibre catcher (capacity approx. 4 l),
- Including two drain plugs ¼" for pre-filter and pump housing, can be used for swimming pool water with a salt concentration of up to 1.6% (corresponds to 16 g/l),

- <u>Including</u> skimmer function, to vacuum the water surface with more power every 1, 2 or 3 hours in energy-saving filter mode the water surface with more power.
- · (speed: 600-3,000 rpm, duration 0-30 min).
- Protection class IP55
- Motor or pump shaft does not come into contact with the water in the circuit water in the circuit - electrical separation,
- · Supplied without connection cable,
- · Noise level 48-68.5 dB at 1 m distance,
- Note: Internal time control
- Suitable for salt electrolysis: yes (up to 1.6%)
- · Suitable for seawater: no



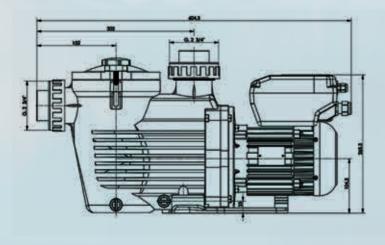
m³/h

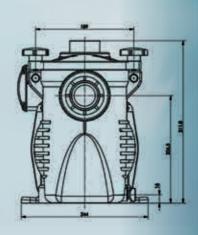


Technical data	
Voltage	230 V/50 Hz
Power consumption P1	max. 1,24 kW
Power output P2	max. 1,10 kW
Pump capacity*	24 m³/h
Suction side connection	63/50 mm Adhesive
Pressure side connection	63/50 mm Adhesive
Weight	15 kg
Pool size	max. 120 m³

\*Pump capacity at 8 m/Ws

Protection class





Version	Code
KS Evo VS	KSEVO





#### **SPECK BADU ALPHA ECO SOFT**



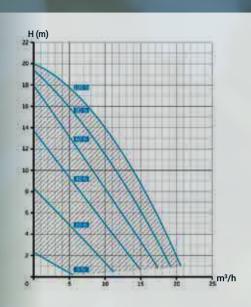


The BADU Alpha Eco Soft has been developed for swimming pools with a water volume of 30 - 90 m<sup>3</sup>. It is therefore the most efficient solution for smaller pools. The noise-optimised motor ensures ideal utilisation of the motor power. Thanks to variably programmable power levels, the pump has a higher degree of efficiency. The pump fulfils every requirement for maximum efficiency and environmental friendliness.

- Permanent magnet motor, adjustable output from 5 100 % (in 1 % increments), corresponds to 800 - 3,450 rpm, for pools with a volume of up to 80 m3.
- Can be installed max. 2 m above or 3 m below the water level, with integrated fibre trap (capacity approx. 0.5 l), can be used for swimming pool water with a salt concentration of up to 0.5 % (corresponds to 5 g/l).
- · Protection class IP55.
- · LED display with current motor power in percent.
- The motor or pump shaft does not come into contact with the water in the circuit. Electrical isolation.
- · Delivery includes 3 m connection cable.
- Noise level 36.7 64.1 dB at a distance of 1 m.
- Note: External time control via potential-free contacts.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- · Suitable for seawater: no

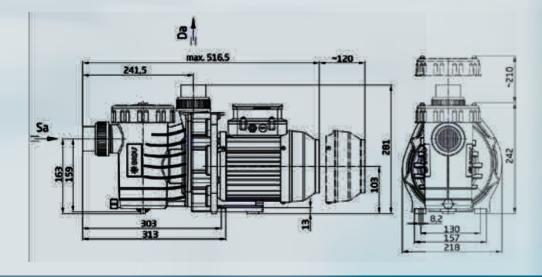






Technical data	
Voltage	230 V/50 Hz
Power consumption P1	0,04 bis 0,75 kW
Power output P2	0,50 kW
Pump capacity*	15,5 m³/h
Suction side connection	50 mm adhesive
Pressure side connection	50 mm adhesive
Weight	7,5 kg
Pool size	10 - 60 m <sup>3</sup>
Protection class	IP55

\*Pump capacity at 8 m/Ws



Version	Code
BADU Alpha Eco Soft	ALECO





#### **AQUAGEM INVERSMART**



NEW



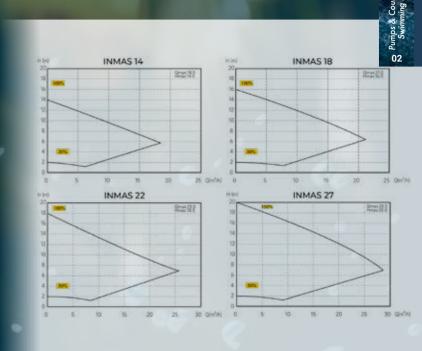
- Extremely quiet the noise level is only 36 dB
- · Intuitive interface:
- Operating mode (Full Inverter / Manual)
- Power consumption display in watts
- Flow rate display in m3/h
- · Connection for external control unit
- · Softstart the pump starts up continuously from 0 amps to the rated output.
- No-Water Protection to protect the pump from running dry
- Including filter control (4 timers)
- · Can be installed max. 2 m above the water level
- Protection class IP55
- Suitable for salt electrolysis: yes (up to 0.5%)
- · Suitable for seawater: no

**Intuitives** Interface









Power consumption display 4 timers for daily operation Mileage from 30%~100% Backwash with one click

#### Efficiency class of the motor: IE4

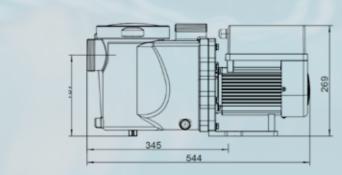
For increased efficiency and to achieve extremely smooth running

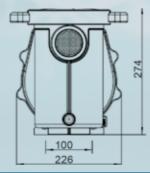
Continuous start from 0 amps up to the rated current

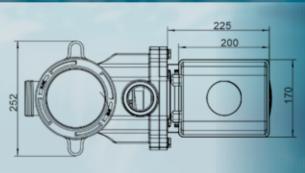
#### **External control optional:**

Digital input

To control your pump with more choice







Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Suction side connection	Pressure side connection	Code
InverSmart 14	230V/50 Hz	max. 0,60 kW	max. 0,47 kW	18 m³/h	2" IG	2" IG	INSMA14
InverSmart 181)	230V/50 Hz	max. 0,75 kW	max. 0,59 kW	21 m³/h	2" IG	2" IG	INSMA18
InverSmart 22	230V/50 Hz	max. 1,00 kW	max. 0,80 kW	25,5 m <sup>3</sup> /h	2" IG	2" IG	INSMA22
InverSmart 271)	230V/50 Hz	max. 1,35 kW	max. 1,10 kW	28,5 m³/h	2" IG	2" IG	INSMA27

<sup>1)</sup> No stock Version, available on request.





#### **SPECK BADU NETLINK**

#### RETROFITTABLE APP CONTROL FOR FREQUENCY-CONTROLLED SPECK PUMPS

NEW

The BADU NetLink system transforms existing variable-speed Speck pumps into smart, remote-controlled devices.





The connection is made easily via potential-free contacts or RS485, which are then connected to the BADU NetLink. With WLAN access to the BADU Connect Server, the pump can be controlled from anywhere.

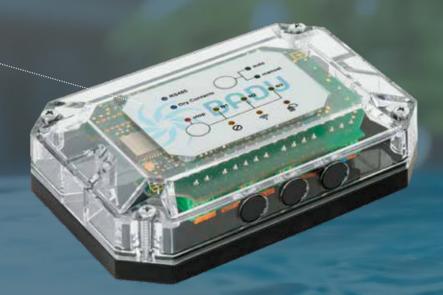
This allows the filter times and speeds of the filter pump to be set and the current power consumption to be monitored via RS485. Without an RS485 connection, e.g. for the compatible pumps listed below, you can choose between the three stages set on the pump instead of the individual speed. For additional safety, a leakage sensor can be connected in the event of a leak in the pump.

- Easy installation via the cable on the pump
- 230 V connection
- · Connection to the home network via LAN cable or WLAN
- ABS housing
- · Weight: 430 g

NetLink is suitable for the following Speck circulation pumps:

- ✓ BADU Alpha Eco Soft
- ✓ BADU Prime Eco VS
- ✓ BADU Delta Eco VS
- BADU Delta-MK Eco VS





#### **BADU CONNECT APP**



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Version	Code
BADU NetLink	NETLI













NEW



## MAKE YOUR PUMP A LL INVERTER





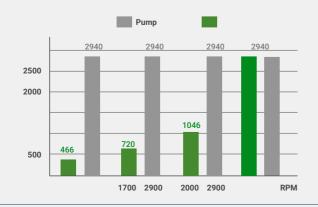


#### WHAT IS A FREQUENCY CONVERTER?

The frequency converter is a device that converts alternating current from one frequency to another. The majority of pool pumps installed on the market are currently equipped with a single speed setting. While they are powerful for heavy-duty tasks such as backwashing, this is not required all the time, as is the case with pumping or filtration. The iSaver makes it possible to convert your existing circulation pump into an inverter pump (frequency-controlled).

#### **UP TO 80% ENERGY SAVING**

With the iSaverx, the pump speed can be set to adapt to different operating conditions, significantly reducing operating costs.









With modern touch screen display

#### **EXTERNAL CONTROL**

Digital inputs, RS485 and relay outputs for external control

#### SIMPLY PLUG & PLAY

Effortless and simple installation on the wall

#### MODERN TECHNOLOGY

Enables 35 pump speeds and has 4 timers

#### **EFFICIENT COOLING**

High-quality aluminum heat sink with two fans for efficient cooling.





#### INNOVATIVES FULL-TOUCH DISPLAY

₽₽₽ W Power consumption

(2355) Engine speed

Night mode (low speed)

Daytime mode (average speed)

Backwash (high speed)

88:88 Current time

Timer sequence

# THE CIRCULATION PUMP UP TO 25% QUIETER

Operation at low speed promises a much more pleasant user experience and can reduce the noise level of the pump up to 25%.







# SIMPLE PLUG & PLAY

Version	Voltage	Output	Output power	Weight	Code
iSaver 1	230 V/50 Hz	0 - 240 V	max. 1,1 kW	5 kg	ISAVE1
iSaver 2 1)	230 V/50 Hz	0 - 240 V	max. 2,2 kW	5 kg	ISAVE2

<sup>1)</sup> No stock item, available on request.





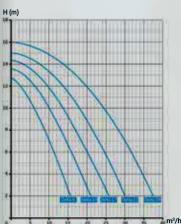




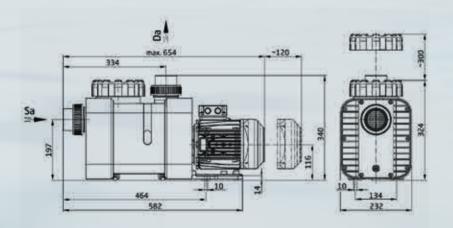


This pump has a maintenance-free motor with high-performance ball bearings and a stainless steel motor shaft. It is particularly quiet and efficient as it has been hydraulically redesigned. LED lighting with transparent cover for easy visual inspection. Internal drain plugs prevent the risk of breakage and high-efficiency technology results in a higher flow rate with lower energy

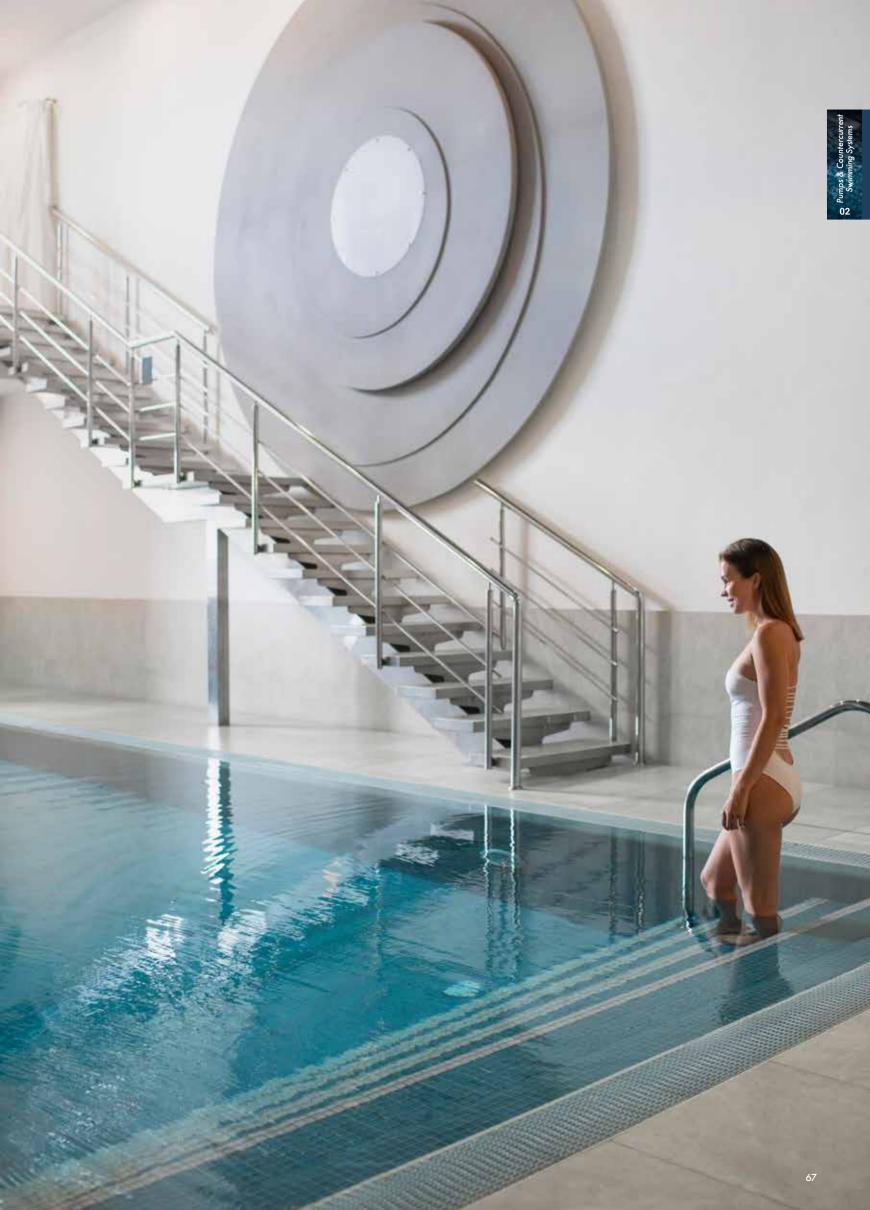
- For pools with a volume of up to 170 m³.
- · Can be installed above and below the water level, max. 3 m each, with integrated fiber catcher (capacity approx. 4 l), can be used up to a salt concentration of 0.5 %.
- Bellows mechanical seal mounted on plastic running hub.
- The motor or pump shaft does not come into contact with the water in the circuit.
- · Electrical isolation.
- · Protection class IP55.
- Supplied without connection cable.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- · Suitable for seawater: no







Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Suction side connection	Pressure side connection	Weight kg	Code
BADU Delta 9	230 V	0,54 kW	0,30 kW	9 m³/h	50 mm	50 mm	12,8	DE09
BADU Delta 9	400 V	0,51 kW	0,30 kW	9 m³/h	50 mm	50 mm	11,8	DE09D
BADU Delta 13	230 V	0,69 kW	0,45 kW	13 m³/h	63 mm	63 mm	12,8	DE13
BADU Delta 13	400 V	0,63 kW	0,45 kW	13 m³/h	63 mm	63 mm	12,6	DE13D
BADU Delta 17	230 V	0,87 kW	0,55 kW	17 m³/h	63 mm	63 mm	14,2	DE17
BADU Delta 17	400 V	0,81 kW	0,55 kW	17 m³/h	63 mm	63 mm	13,9	DE17D
BADU Delta 22	230 V	1,10 kW	0,75 kW	21 m³/h	63 mm	63 mm	15,6	DE22
BADU Delta 22	400 V	1,00 kW	0,75 kW	21 m³/h	63 mm	63 mm	15,4	DE22D
BADU Delta 28	230 V	1,40 kW	1,00 kW	28 m³/h	63 mm	63 mm	19,0	DE28
BADU Delta 28	400 V	1,26 kW	1,00 kW	28 m³/h	63 mm	63 mm	19,8	DE28D







#### SPECK BADU PRIME



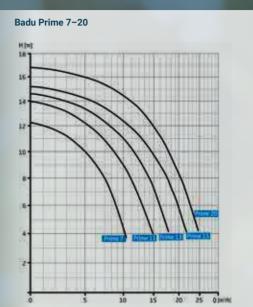


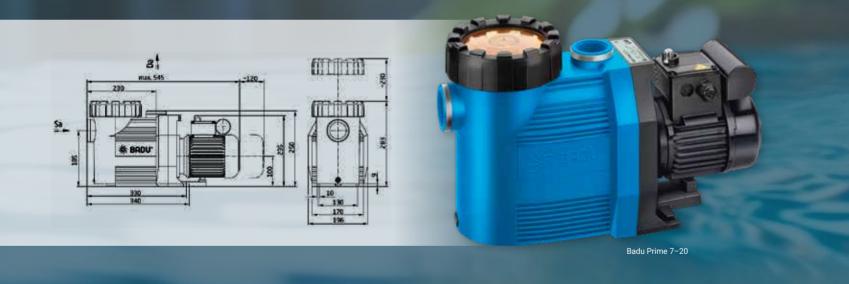


No other swimming pool pump in the BADU range has been as successful as the BADU Prime for decades. Thanks to its glass fibre-reinforced material, it reliably meets all requirements for a pump and is particularly quiet thanks to multiple innovative optimizations. The BADU Prime is designed for filter systems in swimming pools with a size of 90 - 210 m³ and meets the highest demands thanks to its top quality and workmanship. Perfectly shaped and reliable, it is our top model in every respect. The self-priming circulation pump is insensitive and therefore ready for any kind of fun. A practical opening aid for the transparent lid is included in the scope of delivery.

The pump is available in 2 versions: 7-20 and 25-48 (catalog page 69)

- For pools with a volume of up to 120 m³.
- Can be installed above <u>or</u> below the water level, max. 3 m in each case, with integrated fiber trap (approx. 3 l).
- can be used up to a salt concentration of 0.5 %(corresponds to 5 g/l).
- Bellows mechanical seal mounted on plastic impeller hub, motor or pump shaft does not come into contact with the water in the circuit.
- · Electrical isolation.
- Supplied without connection cable.
- · Protection class IP55.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- Suitable for seawater: no





Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Suction side connection	Connection pressure side	Weight kg	Code
BADU Prime 7	230 V/50 Hz	0,54 kW	0,30 kW	7 m³/h	1 ½" IG	1 ½" IG	9,8	PR07
BADU Prime 7	400 V/50 Hz	0,51 kW	0,30 kW	7 m³/h	1 ½" IG	1 ½" IG	9,2	PR07D
BADU Prime 11	230 V/50 Hz	0,65 kW	0,45 kW	11 m³/h	1 ½" IG	1 ½" IG	9,9	PR11
BADU Prime 11	400 V/50 Hz	0,63 kW	0,45 kW	11 m³/h	1 ½" IG	1 ½" IG	9,7	PR11D
BADU Prime 13	230 V/50 Hz	0,87 kW	0,55 kW	14 m³/h	2" IG	1 ½" IG	11,0	PR13
BADU Prime 13	400 V/50 Hz	0,81 kW	0,55 kW	14 m³/h	2" IG	1 ½" IG	11,5	PR13D
BADU Prime 15	230 V/50 Hz	1,10 kW	0,75 kW	17 m³/h	2" IG	1 ½" IG	13,1	PR15
BADU Prime 15	400 V/50 Hz	1,00 kW	0,75 kW	17 m³/h	2" IG	1 ½" IG	11,6	PR15D
BADU Prime 20	230 V/50 Hz	1,40 kW	1,00 kW	20 m³/h	2" IG	1 ½" IG	16,5	PR20
BADU Prime 20	400 V/50 Hz	1,26 kW	1,00 kW	20 m³/h	2" IG	1 ½" IG	13,5	PR20D

Photos: Speck Pumpen \*Pump capacity at 8 m/Ws





#### SPECK BADU PRIME





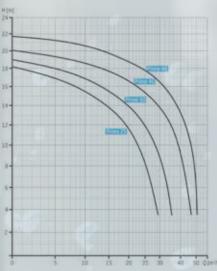


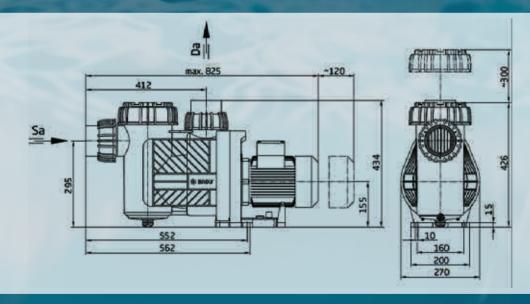


- For pools with a volume of up to 250 m<sup>3</sup>.
- Can be installed above or below the water level, max. 3 m in each case, with integrated fiber trap (capacity BADU Prime 7 - 20: approx. 3 l, BADU Prime 25 - 48: approx. 6 l), can be used up to a salt concentration of 0.5 % (corresponds
- Bellows mechanical seal mounted on plastic impeller hub, motor or pump shaft does not come into contact with the water in the circuit.
- · Electrical isolation.
- Supplied without connection cable.
- Protection class IP55.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- Suitable for seawater: no









Version	Voltage	Power consumption P	Power output 1P2	Pump capacity*	Suction side connection	Connection pressure side	Weight kg	Code
BADU Prime 25	400 V/50 Hz	1,55 kW	1,30 kW	25 m³/h	75 mm Klebe	75 mm Klebe	21,0	PR25
BADU Prime 30	400 V/50 Hz	2,00 kW	1,50 kW	30 m³/h	75 mm Klebe	75 mm Klebe	21,0	PR30
BADU Prime 40	400 V/50 Hz	2,90 kW	2,20 kW	40 m³/h	90 mm Klebe	90 mm Klebe	24,0	PR40
BADU Prime 48	400 V/50 Hz	3,45 kW	2,60 kW	48 m³/h	110 mm Klebe	110 mm Klebe	26,0	PR48

\*Pump capacity at 8 m/Ws Photos: Speck Pumpen



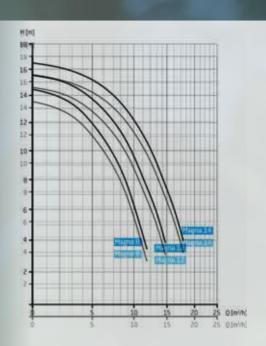
#### SPECK BADU MAGNA

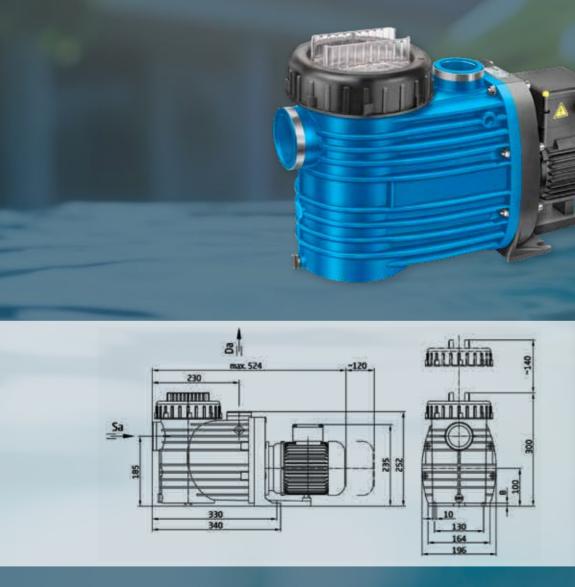
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5 YEARS
MANUFACTURER'S
WARRANTY

The BADU Magna is a proven classic. Especially in continuous operation, the circulation pump is ready for all installation situations. The pool may contain 30 to 90 m³ of water, making the pump the ideal solution for medium-sized pools or smaller swimming ponds. The swimming pool pump is characterized by its high flexibility and also impresses with its consistently high performance.

- For pools with a volume of up to 90 m³.
- Can be installed above or below the water level, max. 3 m in each case, with integrated fiber trap (capacity approx. 3 l), can be used up to a salt concentration of 0.5 % (corresponds to 5 g/l).
- Bellows mechanical seal mounted on plastic impeller hub, motor or pump shaft does not come into contact with the water in the circuit.
- Electrical isolation.
- · Protection class IP55.
- Supplied without connection cable.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- Suitable for seawater: no





Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Suction side connection	Connection pressure side	Weight kg	Code
BADU Magna 8	230 V/50 Hz	0,50 kW	0,30 kW	8,5 m³/h	2" IG	1 ½" IG	9,2	MA08
BADU Magna 12	230 V/50 Hz	0,65 kW	0,45 kW	11 m³/h	2" IG	1 ½" IG	9,5	MA12
BADU Magna 14	230 V/50 Hz	0,98 kW	0,65 kW	14 m³/h	2" IG	1 ½" IG	11,6	MA14

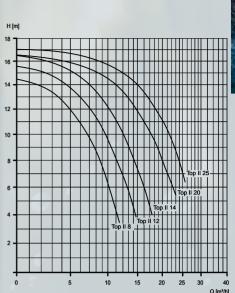
\*Pump capacity at 8 m/Ws Photos: Speck Pumpen



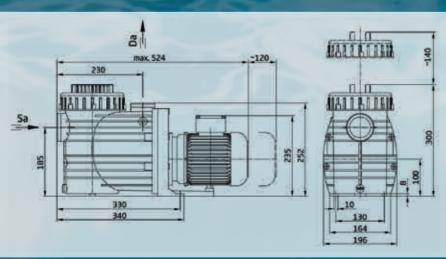
#### SPECK BADU TOP II

The classic BADU swimming pool pump is the ideal solution for mediumsized above-ground pools, in-ground pools or smaller swimming ponds. Thanks to its carefully selected materials and low-maintenance design, the BADU Top II is a proven endurance runner. Thanks to its good suction capacity, it is also possible to connect a floor cleaner upstream of the system at any time. Thanks to its high flexibility and tested safety, this reliable pump series stands for exceptional durability.

- For pools with a volume of up to 145 m³.
- Can be installed above or below the water level, max. 3 m in each case, with integrated fiber trap (capacity approx. 3 l), can be used up to a salt concentration of 0.5 % (corresponds to 5 g/l).
- · Bellows mechanical seal mounted on plastic impeller hub.
- Motor or pump shaft does not come into contact with the water in the circuit - Electrical isolation.
- Includes 3.5 m connection cable.
- · Protection class IPX4.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- · Suitable for seawater: no







Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Connection Suction side	Connection pressure side	Weight kg	Code
BADU Top II-8	230 V/50 Hz	0,50 kW	0,30 kW	8,5 m³/h	2" IG	1 ½" IG	9,2	BT08
BADU Top II-12	230 V/50 Hz	0,65 kW	0,45 kW	11 m³/h	2" IG	1 ½" IG	9,5	BT12
BADU Top II-14	230 V/50 Hz	0,97 kW	0,65 kW	14 m³/h	2" IG	1 ½" IG	11,6	BT14
BADU Top II-20	230 V/50 Hz	1,37 kW	1,05 kW	20 m³/h	2" IG	1 ½" IG	17,0	BT20
BADU Top II-25	230 V/50 Hz	1,70 kW	1,30 kW	24 m³/h	2" IG	1 ½" IG	19,8	BT25

Photo: Speck Pumpen \*Pump capacity at 8 m/Ws 71

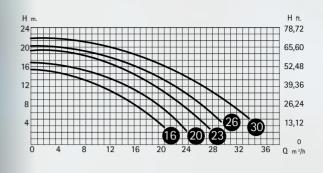




#### MIDA.GAMMA



- For max. 180 m³ basins
- Circulation of the swimming pool water through a filter system.
- Installation up to 3 m above or below the water level.
- Single-stage centrifugal pump with integrated pre-filter.
- Use in salt electrolysis: on request.
- Electric self-priming pump for swimming pools with large pre-filter, which together with its excellent hydraulic performance,
- The motor or pump shaft does not come into contact with the water in the circuit.
- Includes standard key for effortless effortless opening of the pre-filter cover.
- · Protection class IP55.
- Delivery includes 1.4 m connection cable.
- Salt concentration up to 0.5 %.
- · Suitable for seawater: no





Version	Voltage	Power consumption P1	Power output P2	Pump capacity*	Connections (suction and pressure side)	weight kg	Code
MIDA.Gamma 16	230 V/50 Hz	1,11 kW	0,55 kW	15,7 m³/h	63 mm/2" IG	11,9	22760
MIDA.Gamma 20	230 V/50 Hz	1,30 kW	0,75 kW	19,7 m³/h	63 mm/2" IG	13,1	22761
MIDA.Gamma 23	230 V/50 Hz	1,70 kW	1,10 kW	23,0 m³/h	63 mm/2" IG	15,5	22762
MIDA.Gamma 26	230 V/50 Hz	2,10 kW	1,50 kW	26,0 m³/h	63 mm/2" IG	17,1	22763
MIDA.Gamma 30	230 V/50 Hz	2,83 kW	2,20 kW	30,0 m³/h	63 mm/2" IG	21,0	22764

<sup>\*</sup>Pump capacity at 8 m/Ws

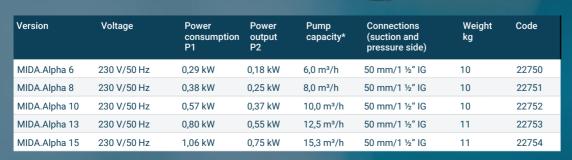


#### MIDA.ALPHA



- For max. 90 m³ pools.
- Circulation of the swimming pool water through a filter system.
- Single-stage centrifugal pump with integrated pre-filter.
- Use in salt electrolysis: on request.
- Electric self-priming pump for swimming pools with a large pre-filter which, together with its excellent hydraulic performance, results in a very large filter capacity.
- Motor or pump shaft does not come into contact with the water in the circuit
- · Protection class IP55.
- Delivery includes 1.5 m connection cable.
- Salt concentration up to 0.5 %.
- Suitable for seawater: no

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0	2	4	6	8	10	12	14	16	18	20	Q m³/h



<sup>\*</sup>Pump capacity at 8 m/Ws





#### MIDA.WAVE



- For pools with a volume of up to 65 m<sup>3</sup>.
- Self-priming plastic pool pump for circulating swimming pool water with integrated fiber catcher (capacity approx. 0.5 l).
- Hose connection with NW 38/32 mm grommet and 50 mm collar bushing
- Adhesive connection, 230 V, corrosion-resistant to swimming pool water and the chemicals supplied,

- Fast self-priming ensures problem-free start-up of the filter system and good floor suction.
- Can be installed max. 2.0 m above the water level or max. 3 m below the water level.
- Block pump with integrated fiber catcher.
- · Bellows mechanical seal mounted on plastic impeller hub.
- The motor or pump shaft does not come into contact with the swimming pool water.
- · Protection class IPX5.
- Delivery includes 3.5 m connection cable.
- Suitable for salt electrolysis: yes (up to 0.5 %)
- · Suitable for seawater: no

							ME ACC
Version	Voltage	Power consumptio P1	Power n output P2	Pump capacity*	Connections (suction side and pressure side)	Weight kg	Code
MIDA.Wave 4	230 V/ 50 Hz	0,35 kW	0,18 kW	4 m³/h	Optionally 50 mm Adhesive or 32/38 mm hose connection	6,4	22700
MIDA.Wave 6	230 V/ 50 Hz	0,45 kW	0,30 kW	6 m³/h	Optionally 50 mm Adhesive or 32/38 mm hose connection	6,8	22701
MIDA.Wave 8	230 V/ 50 Hz	0,60 kW	0,40 kW	8 m³/h	Optionally 50 mm Adhesive or 32/38 mm hose connection	7,8	22702
MIDA.Wave 11	230 V/ 50 Hz	0,69 kW	0,5 kW	11 m³/h	Optionally 50 mm Adhesive or 32/38 mm hose connection	8,8	22703

<sup>\*</sup>Pump capacity at 8 m/Ws

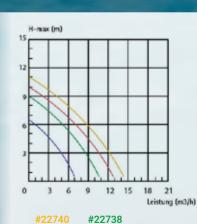


#### MIDA.POMBI



- For pools with a volume of up to 40 m<sup>3</sup>.
- Made of plastic, with integrated pre-filter, for circulating swimming pool water.
- Delivery includes 1.20 m connection cable.
- Protection class IPX4.
- Suitable for salt electrolysis: yes (up to 0.4 %)
- · Suitable for seawater: no
- Protection class IP54.





#22737

#22739

Version	Voltage	Power consumptior P1	Power output P2	Pump capacity max.	Connections (suction side and pressure side)	Weight kg	Code
MIDA.Pombi 4	230 V/ 50 Hz	0,29 kW	0,20 kW	7 m³/h	1½" female thread on both sides with hose nozzles 32/38 mm	5,9	22737
MIDA.Pombi 6	230 V/ 50 Hz	0,41 kW	0,30 kW	11 m³/h	1½" female thread on both sides with hose nozzles 32/38 mm	9,0	22738
MIDA.Pombi 8	230 V/ 50 Hz	0,49 kW	0,35 kW	13 m³/h	1½" female thread on both sides with hose nozzles 32/38 mm	9,9	22739
MIDA.Pombi 10	230 V/ 50 Hz	0,86 kW	0,60 kW	14,5 m³/h	1½" female thread on both sides with hose nozzles 32/38 mm	10,9	22740





#### COUNTER-CURRENT SWIMMING SYSTEMS



#### 

#### 🙌 ) SPECK BADU JET TURBO PRO & TURBO PRO SALT

Innovation, performance and elegant design combined



The premium counter-current swimming system BADU JET Turbo Pro offers you all the advantages of the BADU JET Turbo and has the power for all those who want even more performance for their training at competition level. Developed for demanding swimmers, the BADU JET Turbo Pro is your ideal training partner and challenges even professional athletes.

Consisting of 1 x pre-assembly kit and 1 x preassembly kit of your choice.

For wall installation in all pool designs, for prefabricated pools up to a wall thickness of 7 mm, except round pools. For prefabricated pools with a wall thickness of 8-17 mm, the additional kit #1203-ZK (see catalog page 75) is required.

For performance-oriented professional workouts, de-voltage, rehab training, fitness or recreational fun.

A flush-mounted installation housing in the pool uses innovative propeller technology to draw water in via the cover and return it to the pool with a powerful jet. The system is driven by an efficient, fanless, fully encapsulated permanent magnet motor. The power is regulated and switched on and off using the integrated piezo buttons or a remote control.



- ABS installation housing
- ABS nozzle housing
- ABS/stainless steel panels · Stainless steel screws V4A/AISI 316\*
- · Intermediate flange PPE
- · Plastic drive unit
- · Plain bearing SiC/SiC
- V4A/AISI 316\*

\*max. 400 mg/l choride content, 0.1 % salt concentration



#### SPECK BADU JET TURBO PRO-VORMONTAGESATZ

Design 1

for Design 1\*, 2\* and Design Salt

#### Scope of delivery

- · ABS plastic installation housing
- · Intake orifice
- Front panels ABS/stainless steel V4A/AISI 316\* Design 1 or Design 2
- · Drive unit
- · Nozzle unit
- · Piezo pushbutton
- · Seals
- · Stainless steel screws V4A/AISI 316\*
- Intermediate flange PPE
- · Plain bearing SiC/SiC

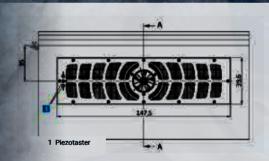


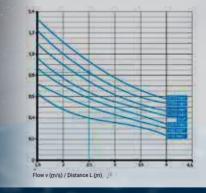


ign 2	

Version	Code
BADU JET Turbo Pro Pre-assembly kit, Design 1	1203-T1
BADU JET Turbo Pro Pre-assembly kit, Design 2	1203-T2

\*Not suitable for salt electrolysis







#### SALZWATER VERSION

The piezo push-button and the screws are also corrosion-resistant in the saltwater version and made of high-quality V5A stainless steel.





Design Salt

Version	Code
BADU JET Turbo Pro Salt Pre-assembly kit, Design Salt	1203-T3

Badu Jet technical shaft





#### **ACTUATOR SET 3 N~ COMPLETE MOUNTING SET**

#### Scope of delivery

- Motor unit\* (sealless magnetic coupling)
- Frequency inverter
- Switch box
- · Waterproof remote control
- Screws stainless steel V4A/AISI 316
- Shielded connection cable, 10 or 25m (see below)

#### **Technical data**

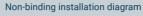
at 50/60 Hz BADU JET Turbo Pro frequency converter

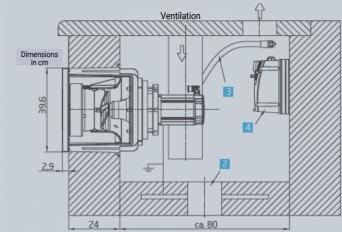
- Performance 4,00 kW
- NetzVoltage 380-480 V
- · Net weight 6,00 kg

#### **Technical data**

at 50/60 Hz BADU JET Turbo Pro drive unit

- Flow rate 150-350 m³/h
- · Power consumption P1/ Output P2 3,60/3,00 kW
- Number of nozzles 1 (Ø 172 mm)
- Outflow velocity 1,80-4,10 m/s
- Nozzle can be swiveled on all sides ± 5 Grad
- Net weight 51,50 kg





- 2 Floor drain
- 3 Protective conduit, piezo push-button cable
- 4 Frequency converter

Version	Voltage	Power output P2	Cable length	Code
BADU JET Turbo Pro Finished assembly kit	400 V	3,00 kW	10 m	1203-TA
BADU JET Turbo Pro Finished assembly kit	400 V	3,00 kW	25 m	1203-TA2

\*max. 0.5% salt concentration



#### **ADDITIONAL KIT**

Version Code

Additional kit for prefabricated basins with wall thickness 8-17 mm 1203-ZK

For pool wall thicknesses from 8 mm on request.

When ordering a complete system, please state the Version number of the standard installation kit and drive kit.



NEW

#### 

#### **SPECK BADU JET TURBO LIGHT**

The entry into the turbo class. Complete system with max. 200 m³/h with only 1.80 kW power consumption.







Gemäß Garantiebedingunger

Efficient permanent magnet motor with mechanical seal with integrated frequency converter and 3 stages (125-200 m³). ABS white cover - system is not suitable for salt electrolysis ABS installation housing, nozzle unit and cover with stainless steel screws.

Mechanical seal: Carbon/ceramic/NBR Flow rate: 125-200 m³/h bei 230 V / 1~ Power consumption P1: 0,09 – 1,80 kW, Power output P2: 0,05 – 1,40 kW Rated current: 0,65 – 7,80 A 1 Nozzle 172 mm, +/-5° pivotable Net weight: 43,5 kg



Version	Code
BADU JET Turbo Light	1205

Badu Jet technical shaft #1206 available on request

75

\*Not suitable for salt electrolysis





#### **SPECK BADU JET TURBO & TURBO SALT**

Innovation, performance and elegant design combined.









According to warranty condition

The premium counter-current swimming system BADU JET Turbo combines innovative technology with elegant design in the proven BADU quality "Made in Germany". More compact than the BADU JET Turbo Pro, the BADU JET Turbo is perfect for recreational and everyday swimmers. But it is not only a design highlight, it also shines in terms of safety and is certified with the GS seal\* from TÜV. The BADU Jet Turbo is an upgrade for any pool and offers an endless swimming experience without the need to turn. For prefabricated pools with a wall thickness of 8-17 mm, the additional kit #1203-ZK (see catalog page 77) is required.

- · ABS installation housing
- Nozzle housing ABS
- · ABS/stainless steel covers
- Intermediate flange PPE
- Drive unit PPE/PP/stainless steel
- · Plain bearing SiC/SiC
- · Stainless steel screws



#### **INNOVATIVE**

The flow-optimized and efficient propeller technology creates an even, soft flow pattern and thus enables a particularly natural swimming experience that is similar to a real open water feeling.

#### **AESTHETIC**

On the pool side, covers made of high-quality polished stainless steel are available in two different designs that blend harmoniously into exclusively designed pool facilities without detracting from the pool's aesthetics.

#### **LOW MAINTENANCE**

The BADU JET Turbo is driven by an efficient permanent magnet motor. Power is transmitted to the propeller without contact via a magnetic coupling. Without a continuous drive shaft and dynamic sealing, the design is particularly low-wear. And it is particularly easy to maintain, as the drive unit can be easily removed at any time without having to lower the pool water.

#### SAFE

But the BADU JET Turbo is not only a real highlight in terms of design, it also shines in terms of safety: designed in compliance with the relevant safety standards (DIN EN 16582-1 & DIN EN 16713-2) and certified with the GS seal\* by TÜV, it guarantees safe swimming fun for the whole family. In addition, all electrical components are hermetically separated from the pool water so that no voltage enters the pool.

#### श

#### SPECK BADU TURBO STANDARD-VORMONTAGESATZ

FOR DESIGN 1, DESIGN 2 & DESIGN SALT

#### Scope of delivery

- · Plastic installation housing
- · Clamping ring
- Suction grille
- Stainless steel panel design 1\*, Design 2\* or Design Salt
- Propeller unit
- Nozzle unit
- Piezo pushbutton
- Seals
- Screws



\*Not suitable for salt electrolysis



\*Not suitable for salt electrolysis

#### SALTWATER VERSION



The piezo buttons and screws in the salt water version are also corrosion-resistant and made of high-quality **V5A stainless steel**.



Desian 1

Design 2

Design Sal

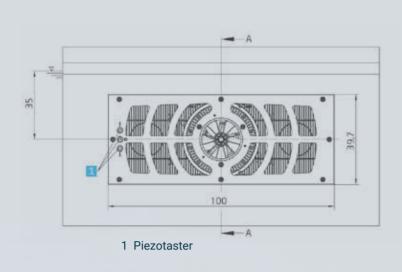


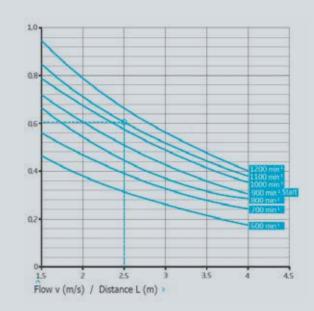
Badu Jet technical shaft #1206 available on request

Version	Code
BADU JET Turbo Pre-assembly kit, Design 1	1204-T1
BADU JET Turbo Pre-assembly kit, Design 2	1204-T2
BADU JET Turbo Salt Pre-assembly kit, Design Salt	1204-T3

Version#1204-TA1 or #1204-TA2 is mandatory.











#### **ACTUATOR SET 3 N~ COMPLETE MOUNTING SET**

#### Scope of delivery

- Motor unit\* (sealless magnetic coupling)
- Frequency inverter
- Switch box
- Remote control
- Screws
- Motor cable, shielded, 10m or 25m

#### Technical data

at 50/60 Hz BADU JET Turbo Pro drive unit

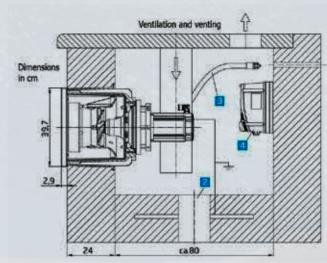
- Flow rate 125-245 m<sup>3</sup>/h
- Power consumption P1/ output P2 1,90/1,50 kW
- Number of nozzles 1 (Ø 172 mm)
- Outflow velocity 1,50-3,00 m/s
- Nozzle can be swiveled on all sides ± 5 Grad
- Net weight 43,50 kg

#### **Technical data**

Net weight at 50/60 Hz BADU JET Turbo frequency converter

- Performance 1,50 kW
- Voltage 200-240 V
- Net weight 4,10 kg

#### Non-binding installation diagram



- 2 Floor drain
- 3 Protective hose, Piezo push-button cable
- 4 Frequency converter

Version	Voltage	Power output P2	Cable length	Code
BADU JET Turbo Finished assembly kit	200 - 240 V	1,50 kW	25 m	1204-TA1
BADU JET Turbo Finished assembly kit	200 - 240 V	1,50 kW	10 m	1204-TA

\*max. 0.5% salt concentration



### ADDITIONAL KIT

Version	Code
Additional kit for prefabricated pools with wall thickness 8-17 mm	1203-ZK

For pool wall thicknesses from 8 mm on request.

When ordering a complete system, please state the Version number of the standard mounting kit <u>and</u> drive kit.

\*max. 0.5% salt concentration

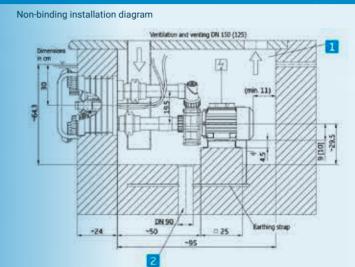


#### **SPECK BADU JET PRIMAVERA**

INNOVATION, PERFORMANCE AND ELEGANT DESIGN COMBINED

For wall installation in all pool designs, as an attraction, for fitness, as a wave or air bubble bath, for underwater massage according to medical advice. Swimming is also possible without turning in small pools.





- 1 Shaft width min. 70 cm
- 2 Floor drain

- · Built-in housing made of ABS
- Nozzle housing made of ABS
- Inner parts made of PP/PC/ASA
- Suction/pressure line made of PVC
- Gate valves and fittings made of PVC
- Cover/handle made of stainless steel V4A/AISI
- · Including waterproof remote control

A powerful BADU pump connected via a suction and pressure line draws in water through a plastic installation and nozzle housing installed flush in the pool and returns it to the pool with a powerful jet via two adjustable nozzles (can be swiveled through 60° on all sides).

A large number of openings in the intake screen ensure an extremely low intake flow. The eye-catcher of this system is a high-quality stainless steel panel, which impresses with its flowing and homogeneous design. A built-in LED light creates a pleasant ambience.

Technical data at 50 Hz	21-81/33 G 29° *	21-81/34 G 29° *
Flow rate of the pump (m3/h)***	75	85
Voltage	3 N~ 400/230 V/1~230 V	3 N~ Δ 400 V
Power consumption P1/ output P2 (kW)	3,74/3,00/3,90/3,00	4,55/4,00
Number of nozzles (Ø 40 mm)	2	2
Outlet pressure at the nozzles (bar)	1,00	1,00
Outflow velocity centered 2 m in front of the nozzles (m/s)	1,10	1,20
Massage pressure (bar) max.	1,60	1,80
Nozzles can be swiveled on all sides (degrees)	60	60
(13)		

Version	Voltage	Power output P2	Code
Additional KIT for BADU JET Primavera for tiled basins			1201-P-KIT
Winter plate KIT for BADU JET Primavera for sealing & closing the installation part			1201-PW
BADU JET Primavera pre-assembly kit			BJ-PV01
BADU JET Primavera with white LED, prefabricated mounting kit	400 V	3,00 kW	1201-PFM3
BADU JET Primavera with multicolor LED RGB, prefabricated mounting kit	400 V	3,00 kW	1201-PFM4
BADU JET Primavera with white LED, prefabricated mounting kit	230 V	3,00 kW	1201-PFM1
BADU JET Primavera with multicolor LED RGB, prefabricated mounting kit	230 V	3,00 kW	1201-PFM2
BADU JET Primavera with white LED, prefabricated mounting kit	400 V	4,0 kW	1201-PFM5
BADU JET Primavera with multicolor LED RGB, prefabricated mounting kit	400 V	4,00 kW	1201-PFM6





#### **SPECK BADU JET PRIMAVERA AK**

INNOVATION, PERFORMANCE AND ELEGANT DESIGN COMBINED

For wall installation in all pool designs, as an attraction, for fitness, as a wave or air bubble bath, for underwater massage according to medical advice. Swimming is also possible without turning in small pools.

A powerful BADU pump connected via a suction and pressure line draws in water through a plastic installation and nozzle housing installed flush in the pool and returns it to the pool with a powerful jet via two adjustable nozzles that can be swiveled through 60° on

A large number of openings in the intake orifice ensure an extremely low intake flow.





With LED lighting

- Built-in housing made of ABS
- · Nozzle housing made of ABS
- Inner parts made of PP/PC/ASA
- Suction/pressure line made of PVC Gate valves and fittings made of PVC
- <u>Including</u> waterproof remote control

Technical data at 50 Hz	21-81/33 G 29° *	21-81/34 G 29° *
Flow rate of the pump (m3/h)**	75	85
Voltage	3 N~ 400/230 V/1~230 V	3 N~ Δ 400 V
Power consumption P1/ output P2 (kW)	3,74/3,00/3,90/3,00	4,55/4,00
Number of nozzles (Ø 40 mm)	2	2
Outlet pressure at the nozzles (bar)	1,00	1,00
Outflow velocity centered 2 m in front of the nozzle: (m/s)	s 1,10	1,20
Massage pressure (bar) max.	1,60	1,80
Nozzles can be swiveled on all sides (degrees)	60	60

<sup>\*\*</sup>max. salt concentration 2.0 %

\* **21-81**: Drive pump Badu 21-81 33G: Suction/pressure connection d 90 mm 29°: Angled discharge nozzle (indication of the angular position)

Ausführung	Voltage	Power output P2	Code
BADU JET Primavera Pre-assembly kit			BJ-PV01
BADU JET Primavera AK with white LED, prefabricated mounting kit	230 V	3,00 kW	1201-PFM7
BADU JET Primavera AK with white LED, prefabricated mounting kit	400 V	4,00 kW	1201-PFM8



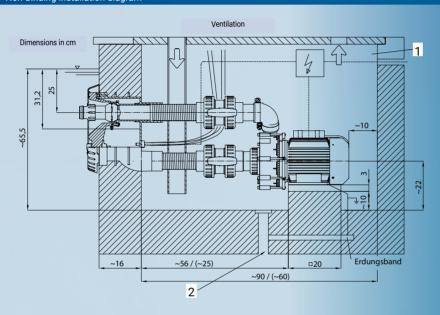
#### **SPECK BADU JET SMART**

#### **EXERCISE AND FUN IN THE WATER!**

The compact entry-level model, also suitable for salt electrolysis. For wall installation in all pool designs, as an attraction, for fitness, as a wave or air bubble bath, for underwater massage according to medical advice. Swimming is possible without turning, even in small pools. A powerful BADU pump connected via a suction and pressure line draws in water through a flush-mounted plastic installation and nozzle housing in the pool and returns it to the pool with a powerful jet via an adjustable nozzle that can be swiveled through 60° on all sides. A large number of openings around the nozzle housing ensure an extremely low suction flow. The pneumatic on/off switch and the control for the tingling air bubble bath are located in the nozzle housing.

Note: max. salt concentration 0.5 %

#### Non-binding installation diagram



• Built-in housing made of ABS

BADUJET

- Nozzle housing made of ABS
- Inner parts made of ABS/stainless steel
- Suction/pressure line made of PVC
- · PVC ball valves and fittings

Optional: With colored cover in black, light grey, light blue or cream

- 1 Shaft width min. 70 cm
- 2 Floor drain

Technical data at 50 Hz	21-50/44 GT 27° *	21-50/43 GT 27° *
Flow rate of the pump (m3/h)	45	40
Voltage	3 N~ 400/230 V	1~230 V
Power consumption P1/ output P2 (kW)	2,74/2,20	2,12/1,60
Number of nozzles (Ø 40 mm)	1	1
Outlet pressure at the nozzles (bar)	1,00	0,90
Outflow velocity centered 2 m in front of the nozzles (m/s)	1,00	1,00
Massage pressure (bar) max.	1,70	1,70
Nozzles can be swiveled on all sides (degrees)	60	60
Net weight (kg)	24	26

\* 21-81: Drive pump Badu 21-81
33G: Suction/pressure connection d 90 mm
29°: Angled discharge nozzle
(indication of the angular position)

Version	Voltage	Power output P2	Code
BADU JET Smart Pre-assembly kit			1200-V
BADU JET Smart Pre-assembly kit	400 V	2,20 kW	1200-SK400
BADU JET Smart Pre-assembly kit	230 V	1,60 kW	1200-SK

#### **ACCESSORIES**

Version	Code
Ball valve kit	1201-W-KH

\*max. 0.5% salt concentration



SELF-PRIMING PUMP FOR INSTALLATION ABOVE THE WATER LEVEL





The compact centrifugal pump with asynchronous motor impresses with its high flow rate and transforms the pool into a leisure and sports area. The nozzle is directionally adjustable and the air admixture and outlet pressure can also be regulated.

The connection of the pre-assembly kit is 63 mm inside and 75 mm outside. The orifice diameter is 424 mm and the mounting on the pool wall is 70 mm. Suitable for all pool versions, a minimum diameter of 3.5 m is required for round pools.

#### The complete system consists of:

- Self-priming pump 230 V or 400 V
- Switch box 230 V or 400 V
- Pre-assembly kit, made of plastic including flange kit, front panel, pneumatic switch and non-return valve, 2 x ball valve 63 mm, 2 x transition sleeve 2 ½" x 75 mm, and 2 x reduction 75 x 63 mm



- $\checkmark$  Plastic version, especially for salt electrolysis up to 7 g/l (0.7%)
- ✓ Self-priming pump for installation above the water level (max. 4 m)
- ✓ No need for a technical shaft

Noise level





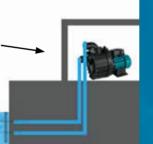
#1203-ND



#1203-NW

The pump can be installed above the water level.







Technical data of the pump	
Connection	2 ½" External thread
Protection class	IP 55
Insulation class	F
Material	Plastic (Thermopolymer)
Mechanical seal material	Graphite / Aluminum oxide
Material motor shaft	Stainless steel AISI 431
Motor housing material	Aluminum
Material seals	NBR / EPDM

max. 85 dB



Non-return sleeve



Version	Voltage	Power	Power output P2	Code
# 1203-NW – Gegenstromanlage Nadorself	230 V	72 m³/h	3,0 kW	1203-NW
# 1203-ND – Gegenstromanlage Nadorself	400 V	79 m³/h	3,8 kW	1203-ND

\*max. 0,5% Salzkonzentration 81



#### **HUGO LAHME EVOLUTION**

FLAT, DYNAMIC, ELEGANT!

- · Evolution connection kit
- · Including installation kit
- 2 directionally adjustable single-jet nozzles
- 2 separate suction inlets Ø 280 mm and fitting made of V4A/AISI 316L<sup>x</sup>
- · Pump capacity 63 m3/h at 1.1 bar
- 2.6 kW pump made of gunmetal or bronze (power consumption: 3.4 kW) 400 V, DS, 50 Hz/5.8 A and timer
- Flange set: Bronze
- · Installation kit: gunmetal or bronze







#### **COMPLETE SYSTEMS**

Version	Suitable for	Code
Gunmetal*	Foil basin (including flange set)	988-F
Gunmetal*	Prefabricated basin	988-FE
Bronze (Gbz10)**	Foil basin (including flange set)	988-FB
Bronze (Gbz10)**	Prefabricated basin	988-FEBR

\*Not suitable for salt electrolysis \*\*max. salt concentration 6 %

\*max. 750 mg/l chloride content for V4A stainless steel/AISI 316

#### **INDIVIDUAL COMPONENTS**

#### Vormontagesatz

Version	Suitable for	Code
Pre-assembly kit gunmetal*	Concrete basin	988-2
Bronze pre-assembly kit**	Concrete basin	988-2B
Pre-assembly kit gunmetal*	Prefabricated basin	988-FE2
Bronze pre-assembly kit**	Prefabricated basin	988-FE2B

\*not suitable for salt electrolysis \*\*max. salt concentration 6 %

#### Flange set

Version	Suitable for	Code
Flange set bronze**	Foil basin	988-3

\*not suitable for salt electrolysis  $\,\,$  \*\*max. salt concentration 6 %

#### **Pre-assembly kit**

- Including pump 2.6 kW pump made of gunmetal or bronze
- · Including switch box
- Including cover

Version	Code
Gunmetal finish mounting kit*	988-1
Bronze ready-to-install kit**	988-1B

\*not suitable for salt electrolysis \*\*max. salt concentration 6 %

#### **ACCESSORIES**

Version	Code
Pump bracket, for wall mounting	985-7



#### **HUGO LAHME TAIFUN DUO BRONZE**

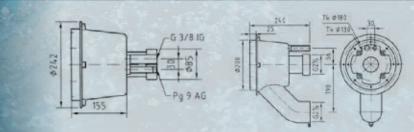
ADJUSTABLE AND VERY STRONG CURRENT!

Consisting of: 1-Piece installation housing, made of bronze, complete with 1 PG 9 protective tube for the cable, 1 G ¾ tube for the air hose, connection option for the potential ring cable.

The installation kit can be fitted flush to both the rear and front formwork.

- Connection fitting with cover made of stainless steel V4A/ AISI 316 (1.4404/1.4571)
- Piezo switch, as well as air regulation and volume adjustment
- The single-jet nozzle is directionally adjustable
- The fitting has infinitely variable plaster compensation up to 35 mm
- Piezo switch with 5 m cable, IP69KDIN4005-9 and IP54 control unit
- Pump capacity: 63 m3/h at 1.1 bar
- 2.6 kW bronze pump (power consumption: 3.4 kW) 400 V, DS, 50 Hz/5.8 A

# #984-FB, #985-7 #988-7 The #88 The #88 The #88



#### **COMPLETE SYSTEMS**

Version	Suitable for	Code
Bronze (Gbz10)**	Foil pool (including flange set)	984-FB
Bronze (Gbz10)**	Prefabricated pool	984-GB

\*\*max. salt concentration 6 % \*\*max. 750 mg/l chloride content for V4A stainless steel/AISI 316

#### SINGLE COMPONENTS

#### **Pre-assembly kit**

Version	Code
Bronze pre-assembly kit**	984-2B

#### Flange set & transition flange

Version	Suitable for	Code
Taifun/Taifun Duo flange set bronze**	Foil basin	985-3
Transition flange with stud bolt bronze**	Prefabricated basin	984-3B

#### **Pre-assembly kit**

- Including 2.6 kW bronze pump
- Including switch box
- Including cover

Version	Code
Bronze ready-to-install kit**	984-1B

#### **ACCESSORIES**

Version	Code
Pump bracket, for wall mounting	985-7
Handle made of stainless steel V4A/AISI 316	985-4

\*\*max. salt concentration 6 %

\*\* max. salt concentration 6 %

\*\* max. salt concentration 6 %